



Harvard Pilgrim
Health Care



City of Boston: Annual Review of Experience PY 2013

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Outline of Presentation

- Key messages
- Who are City of Boston members, and how healthy are they?
- What were the costs to care for these members?
 - Review focuses on **policy year (PY) 2013**: July 2012 to June 2013
- What types of services did members use?
- Prevention, wellness, and condition management
- Observations and opportunities

Key messages

- The implementation of mandatory Medicare has resulted in demographic and health risk decreasing
- Costs to the City on a per member per month (PMPM) basis have decreased 7.4% since policy year 2012
- Utilization has decreased, particularly Emergency Room and Pharmacy (scripts per member per year)
- City of Boston did very well on the HEDIS preventive measures, as well as the chronic condition measures
- A small proportion of members (1.5%) are driving over one quarter of total health costs



Who are City of Boston members, and how healthy are they?

Key Demographic Metrics

- Membership has changed since policy year 2012 (July 2011 to June 2012)
 - City of Chelsea moved to its own account at the end of PY 2012 (May 2012, over 2,450 members)
 - Medicare-eligible members moved to Enhance starting July 2012 (currently 3,500 members)
- HMO/POS membership as of September 2013: 36,351
- Without the retiree population, City of Boston members are now younger than the Municipal/Government Industry average, but slightly older than Plan average
- Compared to Plan, slightly more members 40+ and fewer under 20
 - Compared to Industry, fewer members 40+ and more under 20

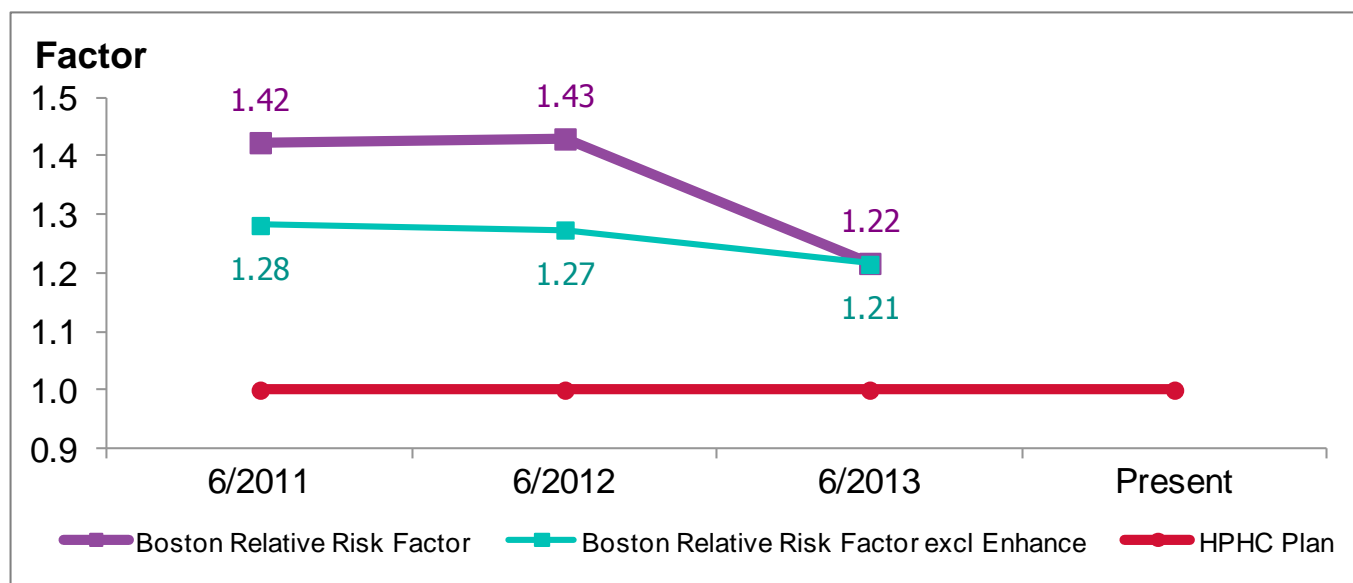
	City of Boston	HPHC Plan	Industry
Members as of 9/2013	36,351	--	--
Subscribers as of 9/2013	15,798	--	--
Average Age	35.3	34.9	36.8
Age/Sex Factor (Demographics)	1.11	1.00	1.13
Average Contract Size	2.3	2.2	2.3
Average Family Size*	3.4	3.3	3.3
% Female Members	52.0%	51.5%	52.0%
% Women of Childbearing Age**	18.7%	19.2%	17.4%
% Individual Contracts	45.4%	47.4%	42.2%
Members 40 or Older	45.7%	45.5%	49.7%
Members 19 or Younger	26.2%	26.5%	25.4%

* Average Family Size (AFS) includes all non-individual contracts.

** Women of Childbearing Age defined here as ages 20 to 44.

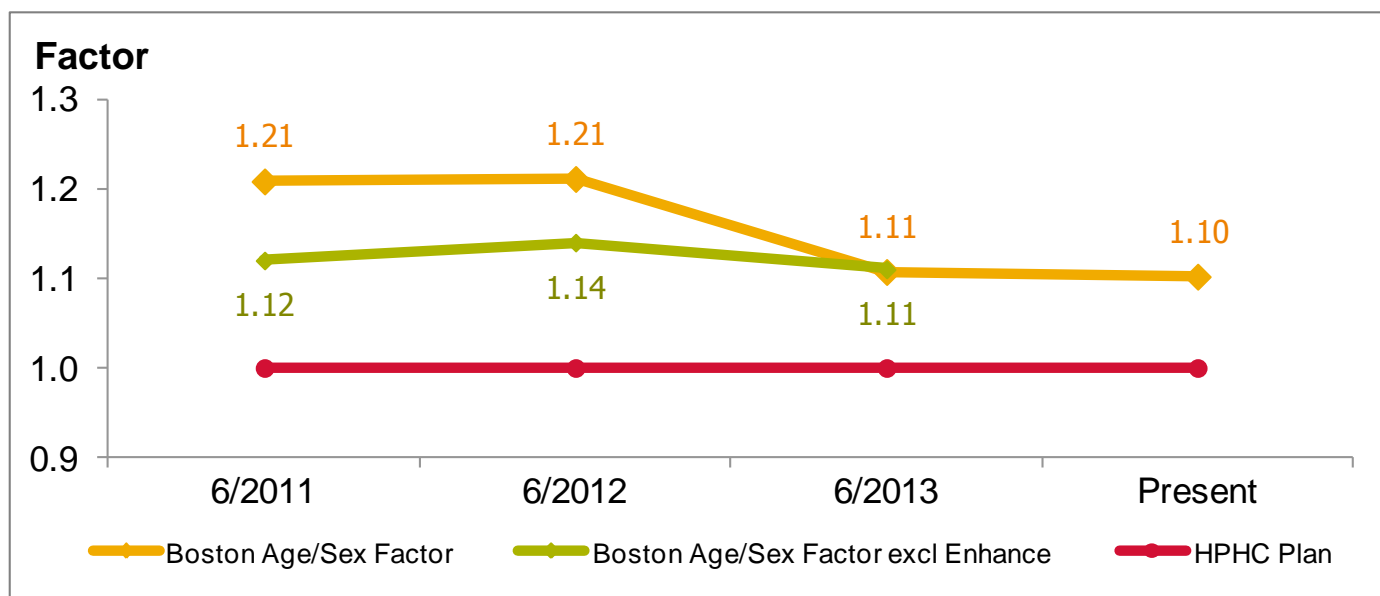
Relative Risk Factors

- Medicare-eligible members helped drive high risk factors
- Relative risk is based solely on claims and diagnoses
- Risk is very high, but is 14-15 points lower without Medicare Enhance members



Demographic (Age/Sex) Factors

- Again, Medicare-eligibles helped drive high risk factors
- Age/sex factor has decreased, and is 10 points lower than it was in prior years
- Members are relatively unhealthy for their age (*relative risk is 10 points higher than age/sex factor*)



Key Diagnostic Groupings

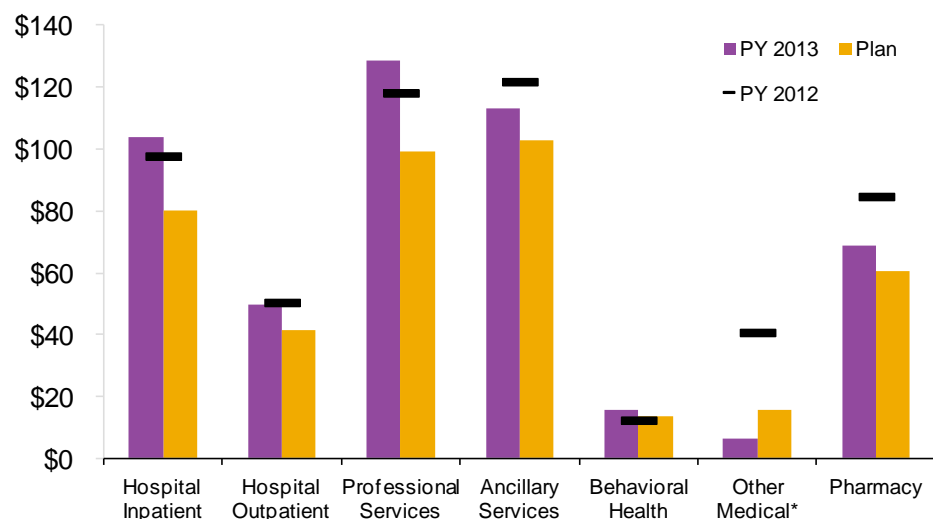
- Pregnancy and Birth was the most costly key diagnostic group in PY 2013. Last year, Cancers topped the list.
- Lifestyle choices (such as nutrition, exercise, and quitting smoking) could have a positive impact on several of these diagnostic groups *(marked with red arrow)*
- High cost claimants (HCCs) were 1.5% of members, but 28% of claims costs

Key Diagnostic Groups	PMPM Costs				
	Prior	Current	Variance v. Prior	HPHC Plan	Variance v. Plan
Pregnancy & birth	\$25.10	\$33.05	31.7%	\$25.85	27.8%
Cancers	\$35.89	\$30.05	-16.3%	\$32.59	-7.8%
Injury & poisoning (including fractures & burns)	\$26.47	\$28.75	8.6%	\$22.02	30.6%
→ Digestive system conditions (including cirrhosis and appendicitis)	\$25.26	\$27.74	9.8%	\$23.77	16.7%
→ Cardiac conditions (including heart attacks and high blood pressure)	\$22.46	\$24.46	8.9%	\$16.90	44.7%
General exams & screenings	\$13.12	\$21.28	62.1%	\$18.60	14.4%
→ Arthritis (including rheumatoid arthritis)	\$15.38	\$16.91	9.9%	\$13.42	25.9%
Back disorders	\$10.28	\$11.99	16.7%	\$9.60	25.0%
Non-cancerous tumors	\$7.60	\$7.56	-0.5%	\$6.14	23.1%
Mental health & substance abuse conditions	\$5.07	\$7.18	41.5%	\$9.90	-27.5%
Congenital anomalies	\$3.77	\$6.83	81.1%	\$4.07	67.9%
→ Diabetes	\$5.21	\$5.83	11.9%	\$3.63	60.5%
Renal failure (including ESRD)	\$6.22	\$5.46	-12.3%	\$2.24	143.8%
Fertility assistance	\$2.85	\$3.36	18.2%	\$2.96	13.7%
Asthma	\$2.27	\$3.08	35.5%	\$1.63	88.6%
Pneumonia, influenza, and other respiratory infections	\$2.28	\$2.26	-0.6%	\$1.83	23.4%
→ COPD	\$1.82	\$2.15	18.1%	\$0.98	119.3%
MS, Parkinson's, and other degenerative nervous system conditions	\$1.72	\$2.10	22.5%	\$1.55	35.4%
Total Key Diagnostic Groups	\$212.77	\$240.04	12.8%	\$197.68	21.4%



What were the costs to care for these members?

Claims Costs: Total and by service area



Notes:

Ancillary Services include lab, x-ray, other diagnostic procedures, chemotherapy, radiation therapy, PT/OT/ST, ambulance, DME, VNA, home health, hospice, etc.

Other Medical includes capitation, which does not apply to self-insured accounts.

- Total employer-paid claims costs in PY 2013: **\$213.4 million** (18% decrease from prior year)
- Cost per member per month (PMPM): **\$488**
 - Cost is 18% higher than Plan average of \$414
 - Costs by service area are 10%-30% higher than Plan average
- Compared to PY 2012, some service area costs increased (such as Hospital Inpatient), but others decreased (such as Ancillary and Pharmacy)
- Cost increases were driven by higher average unit cost (cost per service or admission)

Claims Costs: Top Providers

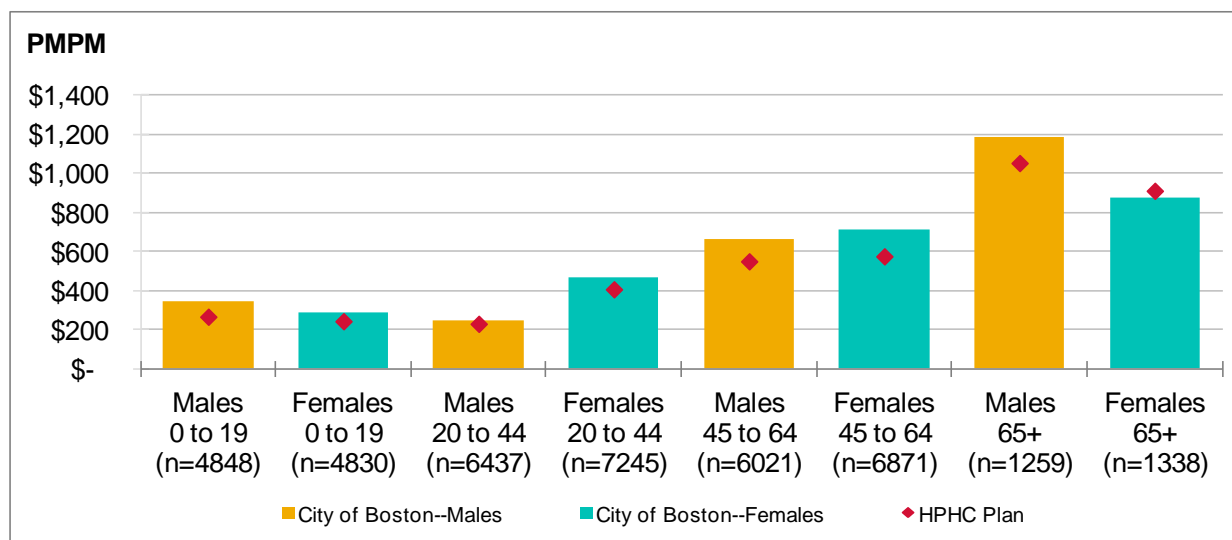
- Many City employees live in Boston, so it's no surprise that 7 of the top 10 providers are Boston academic medical centers
- Top 10 account for 36% of total provider cost
 - 67% of inpatient admissions
 - 63% of outpatient facility services (ER, day surgery, etc.)
 - 24% of ancillary services such as lab, x-ray, chemotherapy, etc.

Provider	2014 Tier	PY 2012 % Medical Costs	PY 2013 Amount Paid	PY 2013 % Medical Costs	HPHC Plan % Medical Costs
BRIGHAM AND WOMEN'S HOSP	Tier 3	8.0%	\$13,586,847	7.6%	4.4%
BETH ISRAEL DEACONESS	Tier 2	6.5%	\$12,471,693	7.0%	3.9%
MASS GENERAL HOSPITAL	Tier 3	6.6%	\$9,041,661	5.1%	4.2%
CHILDRENS HOSPITAL	Tier 3	3.1%	\$5,473,968	3.1%	2.5%
TUFTS MEDICAL CENTER	Tier 2	2.3%	\$4,954,175	2.8%	1.2%
BRIGHAM AND WOMEN'S/FAULKNER	Tier 2	0.0%	\$4,821,738	2.7%	0.7%
SOUTH SHORE HOSPITAL	Tier 3	2.2%	\$4,015,456	2.2%	1.9%
STEWART ST ELIZABETH'S	Tier 2	2.1%	\$3,699,814	2.1%	0.6%
BOSTON MEDICAL CENTER	Tier 2	2.1%	\$3,589,174	2.0%	0.8%
NEW ENGLAND BAPTIST HOSP	Tier 1	1.4%	\$2,470,916	1.4%	0.7%
Total Top Ten Providers		34.4%	\$64,125,441	35.9%	20.9%
All Other Providers		65.6%	\$114,615,783	64.1%	79.1%
Total		100.0%	\$178,741,224	100.0%	100.0%

** Tiers based on Hospital Prefer product tiering. Using national quality benchmarks, as well as plan medical expense information, Harvard Pilgrim placed affiliated hospitals in Tier 1, Tier 2 or Tier 3.*

Claims Costs by Age Range and Sex

- With the exception of females 65 and older, City of Boston's costs are at least 5% higher than average for every age/sex bracket
- The most striking differences:
 - In percentage terms, costs for Males 0 to 19 are 29% above average
 - In dollar terms, Females 45 to 64 and Males 65+ are \$134 above average



Cost Sharing

- Member cost sharing increased by almost 2 percentage points in PY 2013
- However, City of Boston still lags behind the Plan average
 - City of Boston members pay 2.6% of medical costs (5.5 percentage points below Plan)
 - City of Boston members pay 17.6% of pharmacy costs (2.1 percentage points below Plan)
- Costs shown below include Plan and member liability

	PY 2012	PY 2013	Variance v. Prior	HPHC Plan	Variance v. Plan
Total Costs PMPM	\$543.78	\$513.62	-5.5%	\$460.07	11.6%
Medical Cost Share	1.6%	2.6%	+1.0	8.1%	-5.5
Pharmacy Cost Share	10.6%	17.6%	+7.0	19.8%	-2.1
Total Percent Paid by Members	3.2%	5.1%	+1.9	10.0%	-5.0



What types of services did members use?

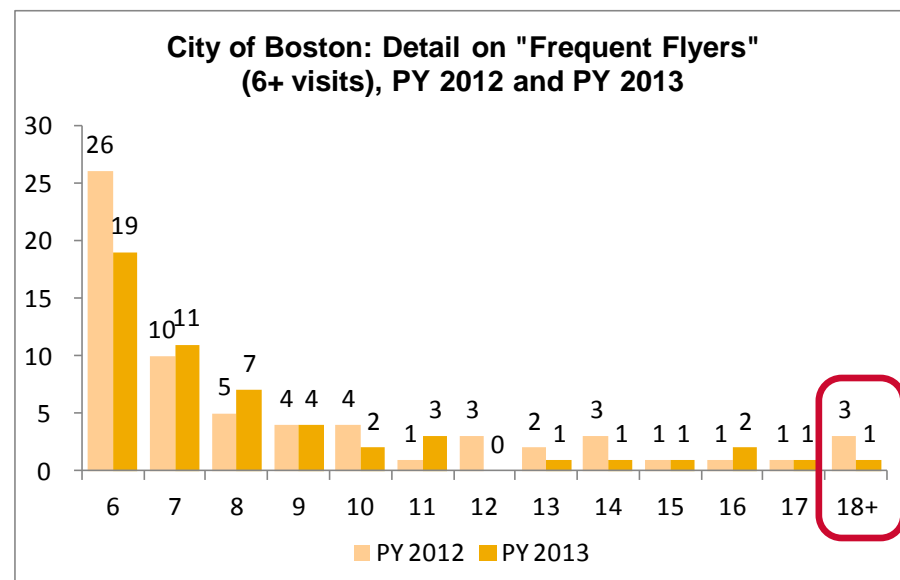
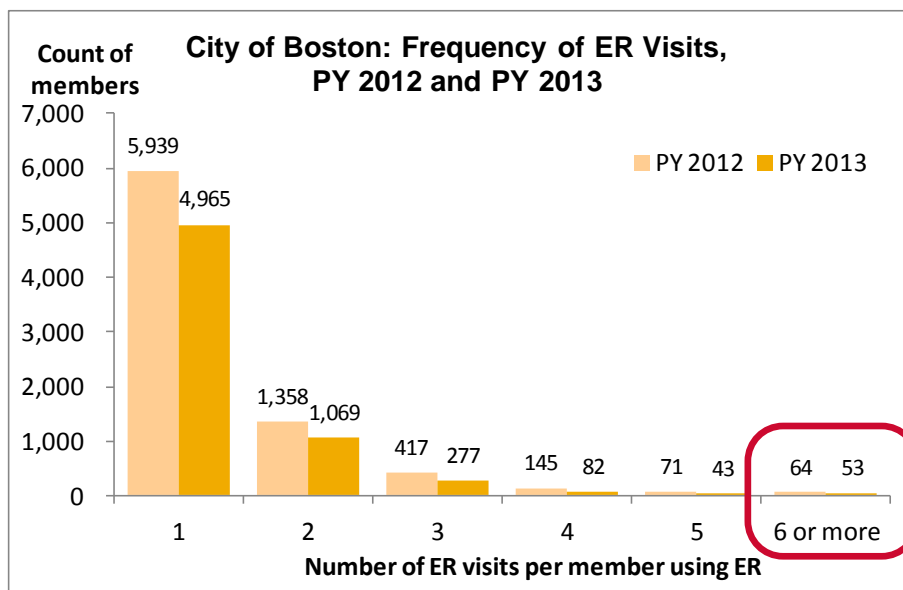
Key Utilization Metrics

- **Hospital Inpatient:** Fewer total admits compared to prior year, but more OB admits
 - Admission rate 26% higher than Plan benchmark
- **Outpatient:** Rates similar to prior year, with the exception of ER
 - Compared to Plan average, similar rate of preventive visits; higher rate of medical care visits; higher ER use
- **Pharmacy:** Lower utilization; increased use of generics; drop in mail order use
 - Compared to Plan average, higher utilization; higher use of generics; lower use of mail order

Category	Metric	PY 2012	PY 2013	Variance v. Prior	HPHC Plan	Variance v. Plan
Hospital Inpatient						
OB Admissions	frequency per 1,000	12.4	12.8	3.5%	12.2	5.1%
Total Admissions	frequency per 1,000	94.1	85.5	-9.1%	67.9	26.1%
Outpatient						
Office Visits for Well Care	visits per 1,000	727.6	747.4	2.7%	745.1	0.3%
Office Visits for Medical Care	visits per 1,000	4,327.5	3,938.9	-9.0%	3,509.4	12.2%
Emergency Room	visits per 1,000	277.9	245.7	-11.6%	181.2	35.6%
Average ER Visits per ER Claimant	visits	1.4	1.4	-3.7%	1.3	4.3%
Pharmacy						
Pharmacy Utilization	scripts/member/year	17.7	14.1	-20.1%	12.5	13.3%
Tier 1 Utilization	% of total prescriptions	76.1%	79.9%	+3.8	78.6%	+1.3
Generic Utilization	% of total prescriptions	79.7%	82.7%	+3.0	81.3%	+1.4
Mail Order Utilization	% of total prescriptions	8.9%	7.3%	-1.6	13.5%	-6.2

Utilization: Detail on ER use

- City of Boston had over \$3 million in ER costs in PY 2013
 - ER visits per 1,000 members dropped nearly 12% from last year, due at least in part to the higher ER copay implemented in July 2012
 - Members per 1,000 using the ER decreased 8% from PY 2012 to PY 2013
- As in the past, some “repeated users” are helping to drive up the rate of ER visits. Some of them were also “repeated users” in past years.



Prescription Drugs: Top Therapeutic Classes

- Percentage of cost did not vary much for most drug classes
 - Exceptions include Miscellaneous Therapeutic Agents (3-point increase), Antiviral Agents (almost 2-point increase), and Orally Inhaled Preparations (2.5-point increase)
- Statins—ranked second in PY 2012—were ranked 13th in PY 2013
 - Rate of members using statins dropped from 168 to 119 per 1,000

Therapeutic Class	Generally Prescribed for	PY 2012	PY 2013		HPHC Plan
		% Rx Costs	Amount Paid	% Rx Costs	% Rx Costs
Miscellaneous Therapeutic Agents	Miscellaneous medical conditions	10.6%	\$4,082,665	13.5%	15.3%
Antiretroviral Agents	Treat Viral Infections	4.3%	\$1,868,229	6.2%	3.1%
Insulins	Diabetes mellitus (Treat High Blood Sugar)	4.3%	\$1,430,688	4.7%	3.7%
Orally Inhaled Preparations (Steroids)	Corticosteroid for respiratory conditions	2.1%	\$1,370,205	4.5%	3.7%
Antineoplastic Agents	Cancer	3.6%	\$1,172,655	3.9%	3.9%
Antidepressants	Depression	3.1%	\$979,448	3.2%	4.1%
Antipsychotic Agents	Treat a variety of psychological conditions	3.7%	\$915,255	3.0%	3.5%
Contraceptives	Birth Control	1.9%	\$820,768	2.7%	2.6%
Proton-Pump Inhibitors	Treat gastrointestinal disorders	3.1%	\$786,986	2.6%	2.7%
Opiate Agonists	Moderate to severe pain (Pain Relief)	2.4%	\$739,010	2.5%	2.2%
Total Top Ten Therapeutic Classes		38.9%	\$14,165,909	47.0%	44.8%
All Other Therapeutic Classes		61.1%	\$15,981,228	53.0%	55.2%
Total		100.0%	\$30,147,137	100.0%	100.0%

Prescription Drugs: Top Drugs by Name

- Eight of top 10 are from the top therapeutic classes
- Crestor, a statin, is 8th on the list by cost, but 25th by number of scripts (612 members using).
- In contrast, generic statins ranked 2nd, 7th, and 23rd on the top drugs by scripts, representing over 6% of total scripts, but only 0.2% of Pharmacy cost

Drug	Therapeutic Class	PY 2012	PY 2013		HPHC Plan
		% Rx Costs	Amount Paid	% Rx Costs	% Rx Costs
ENBREL	Miscellaneous Therapeutic Agents	2.0%	\$1,022,234	3.4%	3.2%
COPAXONE	Miscellaneous Therapeutic Agents	2.0%	\$707,950	2.3%	2.9%
ABILIFY	Antipsychotic Agents	1.9%	\$682,634	2.3%	2.3%
HUMIRA	Miscellaneous Therapeutic Agents	1.7%	\$682,549	2.3%	3.3%
ADVAIR DISKUS	Orally Inhaled Preparations (Steroids)	2.2%	\$579,798	1.9%	1.7%
NEXIUM	Proton-Pump Inhibitors	2.2%	\$566,119	1.9%	1.8%
ATRIPLA	Antiretroviral Agents	1.2%	\$563,538	1.9%	1.1%
CRESTOR	HMG-CoA Reductase Inhibitors	2.5%	\$559,403	1.9%	1.8%
FLOVENT HFA	Orally Inhaled Preparations (Steroids)	1.4%	\$441,687	1.5%	0.9%
GONAL-F RFF	Infertility Drugs	1.2%	\$441,676	1.5%	1.6%
Total Top Ten Drugs		18.2%	\$6,247,587	20.7%	20.4%
All Other Drugs		81.8%	\$23,899,550	79.3%	79.6%
Total		100.0%	\$30,147,137	100.0%	100.0%

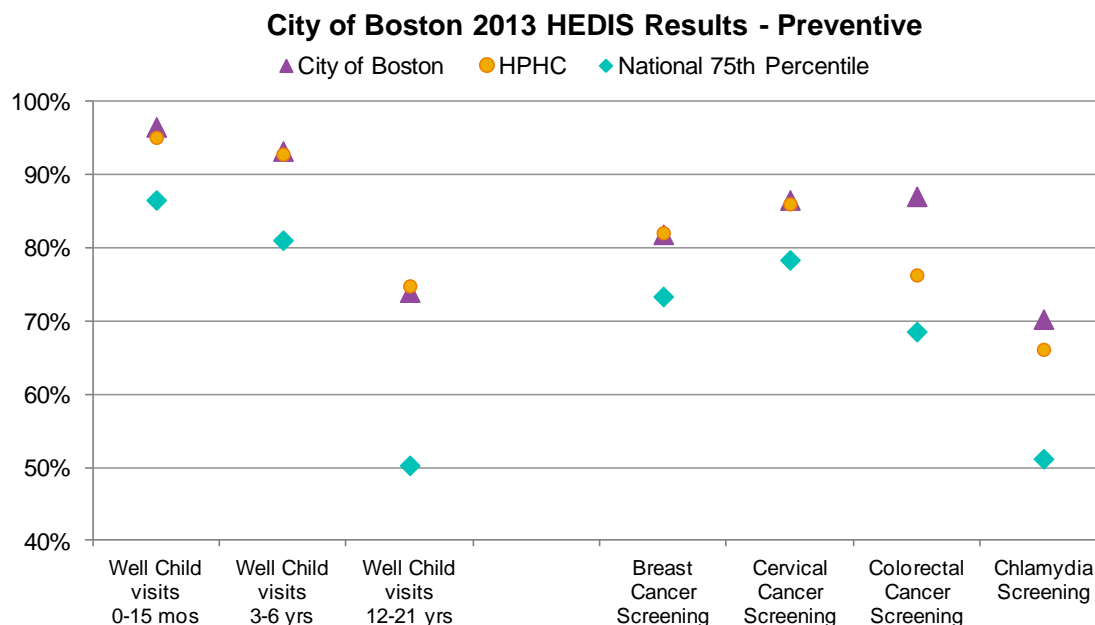


Harvard Pilgrim
Health Care

**What about prevention, wellness, and
condition management?**

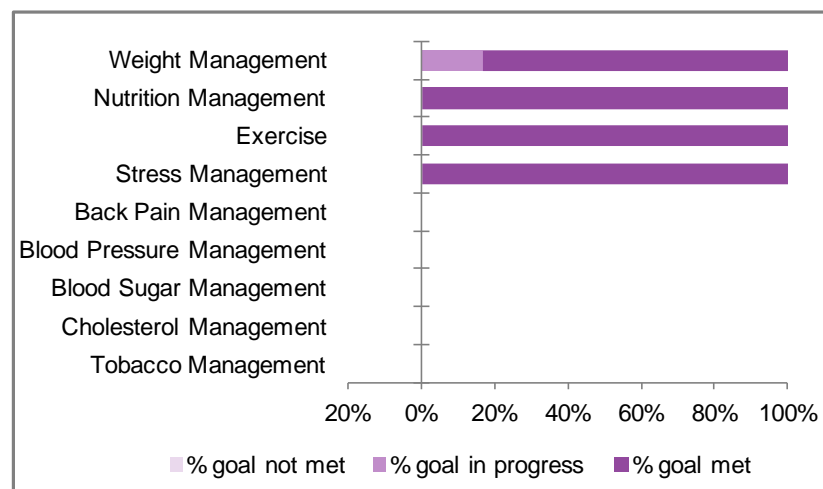
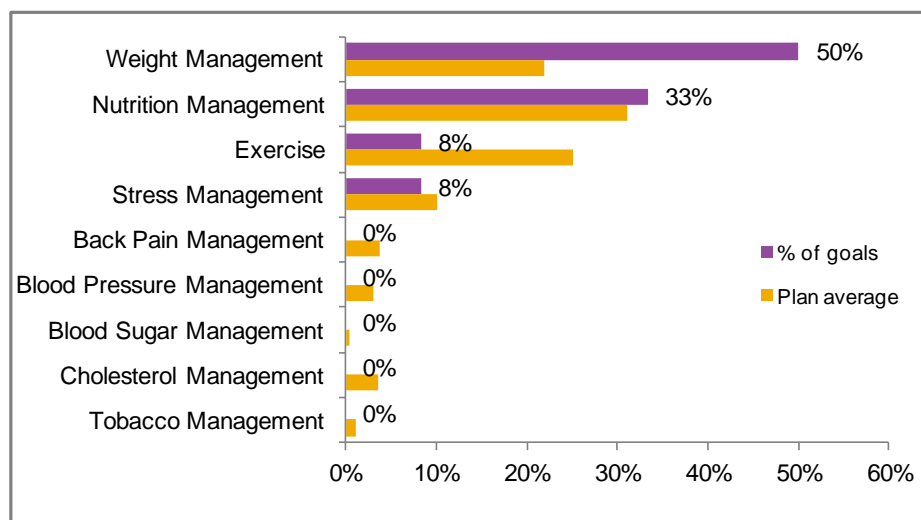
Staying Healthy: Prevention and Screening

- The Healthcare Effectiveness Data and Information Set (HEDIS) includes measures for preventive and curative care, and is one way to assess quality
- The graph below shows how City of Boston compares to the Harvard Pilgrim average and the national 75th percentile benchmarks for **preventive** care
 - All of the City's rates are better than the national benchmark
 - All but two are higher than the Plan average also



Staying Healthy: Lifestyle management

- 11 members took the Health Questionnaire (HQ)
 - Of those, 6 requested coaching
 - 5 of the 6 ultimately engaged with a health coach
- Those 5 members set 12 goals
 - Half dealt with weight management
- 11 of the 12 goals were met; one is still in process



Living with Illness: Chronic conditions

- The majority of members identified with common chronic conditions had asthma or diabetes
- However, those with cardiac conditions had a higher percentage of members considered high-risk
- Participation rates were similar to Plan average, and higher than national average
 - National is 5% for Asthma, 12-16% for Diabetes, 9-12% for CAD, 20-30% for CHF, and 16-20% for COPD

Condition	Total	Low-Moderate Risk		High Risk						
	Total identified	Identified	Enrolled	Identified	% of total identified	Enrolled	Active/ participating	Completed	Outreach in process	Active vs. Plan
Asthma	3,064	2,859	2,630	205	6.7%	205	17 (8%)	41 (20%)	15 (7%)	-0.0
Diabetes	2,328	2,110	1,941	218	9.4%	218	17 (8%)	57 (26%)	21 (10%)	+0.2
Cardiac	423	316	291	107	25.3%	107	7 (7%)	33 (31%)	3 (3%)	-7.3
COPD	662	599	551	63	9.5%	63	14 (22%)	19 (30%)	1 (2%)	+7.2

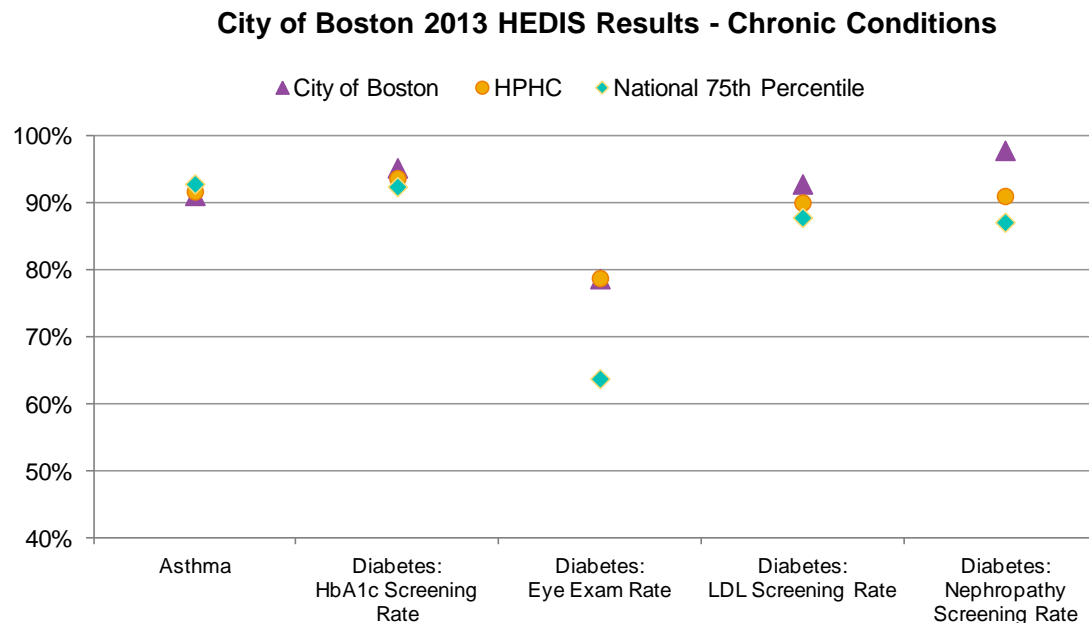
**HPHC book of business for calendar 2012 based on NCQA 2011 standards: participation equals a two-way interaction in which the member receives self management support or health education.*

***Disease Management Purchasing Consortium National Database; rates for Cardiac are for CAD and CHF, respectively.*

Living with Illness:

Chronic condition monitoring

- The graph below shows how City of Boston compares to the Harvard Pilgrim and national 75th percentile benchmarks for HEDIS **chronic condition** monitoring
 - City of Boston better than Harvard Pilgrim benchmark for 3 of 4 diabetes measures
 - Apart from asthma, all of the City's rates are better than the national benchmark
 - Asthma prevalence is higher in the Northeast than the rest of the country



Living with Illness: High-risk management

- Members were enrolled in programs for...
 - Oncology
 - Rare diseases (Crohn's disease, lupus, multiple sclerosis, Parkinson's disease, rheumatoid arthritis, and ulcerative colitis)
 - Chronic kidney disease
 - Complex chronic (a program for members dealing with multiple conditions)
- Levels of participation varied widely
 - The Rare Diseases program had the highest participation rate (56% active or completed); Oncology had the lowest (45% active or completed)
 - Apart from Rare Diseases, participation rates were similar to or higher than Plan average

Program	Total	High Risk				Active vs. Plan
	Total identified	Enrolled	Active/ participating	Completed	Outreach in process	
Oncology	233	233	17 (7%)	88 (38%)	12 (5%)	-1.7
Chronic Kidney	71	71	15 (21%)	21 (30%)	3 (4%)	+2.0
Complex Chronic	263	263	27 (10%)	97 (37%)	11 (4%)	+10.8
Rare Diseases	378	378	15 (4%)	196 (52%)	16 (4%)	-4.9

**HPHC book of business calendar 2012 based on NCQA 2011 standards: participation equals a two-way interaction in which the member receives self management support or health education.*



Observations and Opportunities

Observations and Opportunities (1 of 2)

Findings: *Plan Design*

- New copays were introduced as of July 1, 2012.
 - Office visit copays rose to \$15 PCP/ \$25 Specialist
 - ER copays rose to \$100
 - Pharmacy copays rose to \$10/\$25/\$45
- Member cost sharing increased nearly two percentage points, in part because of the higher copays and in part because of service mix.

Observations

- As of July 2012, City of Boston added the following benefits:
 - Enhanced smoking cessation benefit
 - Preventive care/screenings at \$0 copay, as per the Affordable Care Act (ACA)
- The higher copay helped to eliminate some of the non-emergent ER visits. In PY 2013, the rate of ER utilization dropped by almost 12%.
- At just over 5%, City of Boston's cost sharing is well below the Plan average of 10%
- City of Boston also has a lower rate of cost sharing than the Municipal Industry benchmark in Harvard Pilgrim's book of business (2.2 points lower)

Observations and Opportunities (2 of 2)

Findings: <i>Member Engagement</i>	Observations
<ul style="list-style-type: none"> 945 members were enrolled in specialty programs for Oncology, Rare Diseases, Chronic Kidney Disease, and Complex Chronic, up from 832 in the prior year 	<ul style="list-style-type: none"> Apart from the Rare Diseases program, participation rates were similar to, or higher than, the Plan average.
<ul style="list-style-type: none"> 593 members were identified as high risk and enrolled in programs for common chronic disease (Asthma, Diabetes, Cardiac, and COPD), up from 454 in PY 2012 	<ul style="list-style-type: none"> Apart from the Cardiac program, participation rates near to, or higher than, the Plan average. Participation rates were far higher than the national average.
Findings: <i>Prevention and Wellness</i>	Observations
<ul style="list-style-type: none"> Eleven members have completed the Health Questionnaire (HQ), fewer than last year (19) 	<ul style="list-style-type: none"> Promote the HQ; advise members that they should have a copy of the results from their most recent check-up available when taking the HQ
<ul style="list-style-type: none"> City of Boston's HEDIS results for prevention and screening were far above the national benchmark Apart from Asthma, HEDIS results for chronic condition monitoring were also above average 	<ul style="list-style-type: none"> Continue messaging regarding prevention and wellness, and congratulate members for being proactive
<ul style="list-style-type: none"> Harvard Pilgrim received fitness reimbursement requests for 11.5% of eligible City of Boston contracts 	<ul style="list-style-type: none"> This percentage is close to the Plan average